



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/566,104	01/26/2006	Kazufumi Mizusawa	39565	9571
53054 7590 12/08/2008 PEARNE & GORDON LLP 1801 EAST 9TH STREET SUITE 1200 CLEVELAND, OH 44114-3108				
EXAMINER KONG, SZE-HON				
ART UNIT 3661		PAPER NUMBER		
NOTIFICATION DATE 12/08/2008		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patdocket@peame.com

dchervenak@peame.com

Office Action Summary

Application No.

10/566,104

Applicant(s)

MIZUSAWA, KAZUFUMI

Examiner

SZE-HON KONG

Art Unit

3661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 August 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 are rejected under 35 U.S.C. 102(e) as being anticipated by Okamoto (6,587,760).

For claim 1, Okamoto discloses a drive assisting apparatus for displaying an image around a vehicle, which is acquired by an on-vehicle camera, on a screen of an on-vehicle monitor (Abstract), comprising: a data table for storing thereinto locus data which contains locus display data and adjusting data (Col. 4, lines 41-48, where data storing of the predicted and actual vehicle route image is disclosed), said locus display data being used to display a travel predicted locus of the vehicle corresponding to a steering angle of a steering wheel on the screen (Col. 4, lines 27-48), and said adjusting data being used to adjust a display position of the travel predicted locus on the screen based upon said locus display data (Col. 2, line 65 – col. 3, line 8); steering angle detecting means for detecting the steering angle of the steering wheel (Fig. 1, Col. 1, lines 49-67); and drive assisting image producing means for reading out said locus data corresponding to the steering angle detected by said steering angle detecting means

from said data table (Col. 4, lines 41-48), for producing a drive assisting image by superimposing the travel predicted locus on the image around the vehicle based upon the locus display data and the adjusting data, which are contained in said read locus data, and for outputting said drive assisting image to said on-vehicle monitor (Col. 3, lines 8-20).

For claim 2, Okamoto discloses said drive assisting apparatus includes display position adjusting amount setting means for setting a value of the adjusting data contained in the locus data corresponding to said steering angle (Fig. 3, Col. 4, lines 2-15).

For claim 3, Okamoto discloses based upon a value of adjusting data of said locus data with respect to a typical steering angle (Col. 4, lines 2-26, where the route images are adjusted according to the steering angle), said display position adjusting amount setting means calculates values of adjusting data of said locus data with respect to all of other steering angles (Fig. 4, Col. 4, lines 56-64).

For claim 4, Okamoto discloses said locus data stored in said data table contains initial position setting data used to set an initial position of the travel prediction locus based upon locus display data in addition to both the locus display data and the adjusting data (Col. 2, lines 38-50, where a start point, an initial position is disclosed).

For claim 5, Okamoto discloses said data table stores thereinto a plurality of different locus data sets as to a pan angle, or a roll angle as the locus data corresponding to the steering angle (Fig. 5, 6, Col. 5, lines 1-12 and 54-60 and Col. 6, lines 43-50, where locus data for the actual and predicted routes images angles and the parking position angle are adjusted corresponding to the steering angle).

For claim 6, Okamoto discloses a drive assisting method for displaying an image around a vehicle, which is acquired by an on-vehicle camera, on a screen of an on-vehicle monitor (Abstract), comprising: a step for forming display data which is used to display a travel prediction locus of a vehicle corresponding to a steering angle of a steering wheel on the screen of said on-vehicle monitor in a superimposing manner (Col. 4, lines 27-48); a step for setting adjusting data used to adjust a display position of said travel prediction locus (Col. 2, line 65 – col. 3, line 8); and a step for adjusting the display position of the travel prediction locus formed based upon the display data corresponding to the steering angle of the steering wheel in connection to steering operation of the steering wheel based upon said adjusting data, and for displaying the position-adjusted travel prediction locus on the screen of the on-vehicle monitor in the superimposing manner (Col. 3, lines 9-20).

Response to Arguments

3. Applicant's arguments filed 8/14/2008 have been fully considered but they are not persuasive.

4. On page 2 of the Applicant's Response, Applicant argues that "Neither output adjusts a display position on a screen of travel predicted locus." and "the speed sensor output and the steering angle sensor output... but they do not adjust a display position...".

5. The Examiner respectfully disagrees with the Applicant. Okamoto discloses the predicted vehicle route image and the actual vehicle route image are generated based on outputs of the wheel speed sensor and the steering angle (Col. 4, lines 41-48). It is clear that the display and the position of the predicted vehicle route image and the actual vehicle route image depends on the outputs of the wheel speed sensor and the steering angle. When the output changes, the route images are adjusted on the display.

6. On page 3 of the Applicant's Response, Applicant argues that "Okamoto does not teach reading out locus data from a data table corresponding to a steering angle." and "its reading from the memory is not corresponding to a steering angle."

7. The Examiner respectfully disagrees with the Applicant. Okamoto discloses a graphic image generating circuit and an image superposing circuit that display the route images and the data stored in the memory, the predicted and actual vehicle route images, which are generated based on (corresponds to) outputs of the sensors, are read out from the memory to be displayed on the display (Col. 4, 27-49). The data stored in the memory are clearly corresponding to a steering angle.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

(6,421,081) Markus discloses a video viewing device for vehicles, however, is only discussing displaying the captured images from the rear of the vehicle on a in-vehicle monitor using a movable camera system, display position adjusting control and not generating superimpose driving assist images and steering sensor mean in detail.

(6,567,726) Sakiyama discloses a vehicle driving support system discusses steering angle controlled travel predicted locus and displaying predicted and actual travel routes with guidelines, data storage for storing operation, predicted travel route information and display adjusting means for offset angle compensation.

(6,919,822) Tanaka discloses a parking assist device, however, is only discussing steering angle sensor for adjusting predicted travel route data on display, parking target position setting means for adjusting desired parking position with respect to steering angles, displaying initial setting position, target parking position and not route guidance for driver parking assist in detail.

(6,487,481) Tanaka discloses a parking assisting apparatus is discussing generating an assumed path during the parking procedure determined according to the steering angle of the steering wheel, adjusting locus information with

respect to steering angle, display position adjusting means for adjusting parking position and data storage means for storing various parking assists data.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SZE-HON KONG whose telephone number is (571)270-1503. The examiner can normally be reached on 7:30AM-5PM Mon-Fri, Alt. Fri. Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3661

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

12/2/2008

/SZE-HON KONG/

Sze-Hon Kong
Examiner, Art Unit 3661

/Thomas G. Black/
Supervisory Patent Examiner, Art Unit 3661